Claims

1. A resin coated optical fiber comprising: a bare optical fiber and a primary coating layer and a secondary coating layer sequentially provided on the outer circumference of said bare optical fiber,

wherein said primary coating layer has a thickness of 60 to 200 μm and a pulling force for simultaneously removing said primary coating layer and said secondary coating layer is 100 gf or less.

2. A resin coated optical fiber as set forth in claim 1, wherein said primary coating layer has a tensile strength of 0.5 to 1 MPa and a swelling ratio of 5 to 150 % after immersed in a solvent and said secondary coating layer has a thickness of 20 to 300 μm and a Young's modulus of 100 to 1,500 MPa.

3. A resin coated optical fiber as set forth in claim 1 or 2, wherein said primary coating layer and said secondary coating layer are made of a synthetic resin.

4. A method of removing a coating from a resin coated optical fiber, comprising: immersing the resin coated optical fiber as set forth in any one of claims 1 to 3 over a length of at least 300 mm from its terminal in a solvent and simultaneously removing said primary coating layer and said secondary coating layer after said primary coating layer was swelled.

5. A process for producing an optical fiber part, wherein,

when said bare optical fiber is to be inserted into a thin tube having an internal diameter equivalent to the external diameter of the bare optical fiber as set forth in any one of claims 1 to 3, comprising:

connecting a leading fiber having a smaller diameter than the internal diameter of said thin tube, to the leading end portion of said bare optical fiber; and inserting and pulling said leading fiber into and out of said thin tube thereby to insert said bare optical fiber into said thin tube.

6. A process for producing an optical fiber part as set forth in claim 5, wherein said thin tube is constructed to have a length two times or more of the length to be mounted in an optical part.

7. A process for producing an optical fiber part as set forth in claim 5 or 6, wherein said thin tube having said bare optical fiber inserted thereinto is cut at a predetermined length.

8. A process for producing an optical fiber part as set forth in claim 5, wherein said thin tube is composed of a plurality of short, thin tubes arranged in series with their through holes being axially aligned.

9. A process for producing an optical fiber part as set forth in claim 8, wherein the bare optical fiber inserted into said short, thin tubes is cut to the length of said short, thin tubes.

10. A process for producing an optical fiber part as set forth in any one of claims 5 to 9, wherein said leading fiber is

constructed of a quarts glass fiber, and a synthetic resin coating layer formed on the outer circumference of said quartz glass fiber.

11. A process for producing an optical fiber part as set forth in any one of claims 5 to 9, wherein said leading fiber is constructed of a core, and a cladding and a synthetic resin coating layer sequentially provided on the outer circumference of said core.

12. A process for producing an optical fiber part as set forth in claim 10 or 11, wherein said synthetic resin coating layer is made of a synthetic resin having a high adhesion to said bare optical fiber.

13. A process for producing an optical fiber part as set forth in any one of claims 10 to 12, wherein said synthetic resin coating layer has a thickness of 5 μm or more.

14. A process for producing an optical fiber part as set forth in any one of claims 10 to 13, wherein the glass fiber or cladding for said leading fiber has an external diameter of 50 % or more of the internal diameter of the through hole of said thin tube; and said leading fiber has an external diameter of 98 % or less of the internal diameter of the through hole of said thin tube.